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APPLICATION NO.	FI	LING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/718,799	0/718,799 11/24/2003		Eiju Komuro	115518.01	3452
25944	7590	04/06/2006		EXAMINER	
OLIFF & B		E, PLC	AGUIRRECHEA, JAYDI A		
P.O. BOX 19928 ALEXANDRIA, VA 22320				ART UNIT	PAPER NUMBER
	,			2834	

DATE MAILED: 04/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)					
Office Action Commence	10/718,799	KOMURO ET AL.					
Office Action Summary	Examiner	Art Unit					
	Jaydi A. Aguirrechea	2834					
The MAILING DATE of this communication appo Period for Reply	ears on the cover sheet with the c	orrespondence address					
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period wince the reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	TE OF THIS COMMUNICATION 6(a). In no event, however, may a reply be tim ill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	I. nely filed the mailing date of this communication. D (35 U.S.C. § 133).					
Status							
1)⊠ Responsive to communication(s) filed on 19 Ma	Responsive to communication(s) filed on <u>19 May 2005</u> .						
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	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
<i>,</i> —	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims							
· <u> </u>							
, , , , , , , , , , , , , , , , , , , ,	Claim(s) <u>1-6</u> is/are pending in the application.						
	4a) Of the above claim(s) is/are withdrawn from consideration.						
☐ Claim(s) is/are allowed.							
<u> </u>	Claim(s) <u>1-6</u> is/are rejected.						
	Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or	election requirement.						
Application Papers							
9) ☐ The specification is objected to by the Examiner	•						
10)⊠ The drawing(s) filed on <u>24 November 2003</u> is/are: a)⊠ accepted or b)☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction	on is required if the drawing(s) is obj	ected to. See 37 CFR 1.121(d).					
11)☐ The oath or declaration is objected to by the Exa	aminer. Note the attached Office	Action or form PTO-152.					
Priority under 35 U.S.C. § 119							
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a)□ All b)□ Some * c)⊠ None of:							
1.⊠ Certified copies of the priority documents have been received.							
	 2. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 						
	<u> </u>						
	application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of	, , , ,	d					
	ino continua copios not roccivo	u.					
•							
Attachment(s)							
Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413)					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) B) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	Paper No(s)/Mail Da 5) Notice of Informal Pa	te atent Application (PTO-152)					
Paper No(s)/Mail Date <u>11/03</u> .	6) Other:						

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DETAILED ACTION

Specification

1. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1- 6 are rejected under 35 U.S.C. 102(b) as being anticipated by Ella (US5872493).

Ella discloses a film bulk acoustic resonator filter (figures 7b, 7c, 8b, 8c) comprising a plurality of film bulk acoustic resonators (7, 7', 12, 12') each having a top electrode (8) a bottom electrode (19), and a piezoelectric layer (9) sandwiched between the top and bottom electrodes (shown in figures 7a and 8a), wherein the top electrodes of at least two of the film bulk acoustic resonators are connected to an associated circuitry. Ella discloses the bottom electrode of the first resonator is electrically coupled to the bottom electrode of each of the second and third resonators and the top electrode of the fourth resonator is coupled to the top electrode of the second resonator.

Regarding claim 2, Ella shows (figure 7b, 7c, 8b and 8c) the top electrodes of the at least two of the film bulk acoustic resonators connected to the associated circuitry form part of transmission lines of a coplanar waveguide structure.

Regarding claim 3, Ella discloses the invention wherein the at least two of the film bulk acoustic resonators with the top electrodes connected to the associated circuitry have a common bottom electrode.

Regarding claim 4, Ella discloses a ladder-type film bulk acoustic resonator filter comprising at least two series resonators (7, 12) and at least two parallel resonators (7', 12'), each made of a film bulk acoustic resonator having a top electrode, a bottom electrode, and a piezoelectric layer sandwiched between the top and bottom electrodes, wherein the top electrodes of two of the series resonators are connected to associated circuitry.

Regarding claim 5, Ella discloses the top electrodes of the resonators 7 and 12 connected to an associated circuitry forming part of a signal transmission line.

Regarding claim 6, the two resonators connected in series have a common bottom electrode (19).

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jaydi A. Aguirrechea whose telephone number is 571-272-2018. The examiner can normally be reached on M-Th 9-7.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren E. Schuberg can be reached on 571-272-2044. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JAA 3/29/2006

DATES A SCHUDERG SUPERVISION PATENT EXAMINER